U.S. Fish & Wildlife Service

Questions & Answers about the Draft Recovery Plan for *Deinandra conjugens* (Otay Tarplant)

What is Otay tarplant?

Deinandra conjugens (Otay tarplant) is a member of the sunflower family of plants (Asteraceae) that is found only in portions of San Diego County, California and Baja California, Mexico.

Otay tarplant ranges from 2 to 10 inches in height and produces small clusters of yellow flowers. This plant is generally associated with clay soils, grassland, open coastal sage scrub, and maritime succulent scrub habitats.

Otay tarplant is known as a self-incompatible plant. This means a particular Otay tarplant cannot be fertilized by its own pollen. Viable seeds are formed only when cross-pollination occurs from another Otay tarplant with a different genetic makeup.

Credit: U.S. Fish and Wildlife Service

For long-term conservation of Otay tarplant adequate gene flow between populations must be maintained to ensure the greatest diversity of genetic material. A variety of pollen and seed dispersers play important roles in sustaining Otay tarplant.

Status of Otay Tarplant

The U.S. Fish and Wildlife Service (Service) listed Otay tarplant as threatened, under the Endangered Species Act (Act), in 1998. At the time the plant was listed it was estimated that about 70 percent of the habitat that supported the plant was lost to development or conversion of land to agriculture. Historically, there were about 25 documented populations of Otay tarplant, almost all of them in San Diego County; only one population was documented in Baja California, Mexico.

The size of any particular population of Otay tarplant can vary widely over time depending on what portion of seeds germinate in any given year. Populations of Otay tarplant have ranged from as small as a single plant to more than one million plants.

Threats to Otay tarplant

When the Service listed Otay tarplant under the Act threats to the plant's existence included loss, alteration, and degradation of habitat from urban and agricultural development, and invasion of non-native plants.

A number of the historic populations have been reduced, eliminated, or otherwise impacted by development. It is now estimated that 18 populations of Otay tarplant exist.

Currently, almost all of the known populations of Otay tarplant in San Diego County are found within the boundaries of the County's Multiple Species Conservation Program (MSCP); specifically, the subarea plans for the City of Chula Vista, City of San Diego, and County of San Diego. We determined that implementation of the MSCP would not jeopardize the continued existence of Otay tarplant.

In 2002, critical habitat was designated for Otay tarplant on approximately 6,330 acres of land in San Diego County. Areas included in the designation contain habitat that supports standing plants and seed banks.

Although a number of activities that are required as part of the MSCP and its subarea plans will aid in the conservation of Otary tarplant, we determined that additional actions may be needed to recover the plant to the point where protection under the Act is no longer needed.

Questions and Answers about the Draft Recovery Plan:

What is a recovery plan?
The Act requires the preparation of recovery plans for listed species unless such a plan would not contribute to their conservation. Recovery plans detail the actions necessary to achieve self-sustaining, wild populations of listed species so they will no longer require protection under the Act. A recovery plan is an advisory document. Cooperation from private landowners is voluntary.

Who prepares a recovery plan?
Depending on the species, plans are prepared by Service biologists, a panel of recognized experts under the direction of a Service employee or an appropriate consultant contracted by the Service. Regional Directors are responsible for approving recovery plans for listed species occurring in their region.

The Draft Recovery Plan for Otay tarplant was prepared by a Service biologist with assistance from other staff and non-Service personnel who are knowledgeable about Otay tarplant biology and ecology.

What is the objective of the Draft Recovery Plan for Otay tarplant?
The objective of the draft recovery plan is to ensure the long-term viability of Otay tarplant so that it can be removed from the Federal List of Threatened and Endangered Species.

It is the Service's goal to use the best available scientific and commercial information in developing appropriate recovery actions. We are soliciting public review and comment on the draft recovery plan to ensure the most current information is incorporated into the final plan.

What are recovery tasks within a recovery plan?
Actions needed to recover Otay tarplant include stabilizing and protecting known populations; managing and monitoring conserved areas; developing appropriate management plans for conserved areas; conducting additional studies on the biology and ecology of Otay tarplant; and developing a seed banking strategy to facilitate nursery propagation of plants for use in enhancing or introducing Otay tarplant within its historic range.

When will Otay tarplant be considered for delisting?
Otay tarplant could be considered for delisting when the following criteria have been met:

- Known populations in areas targeted for conservation through the framework of the MSCP and its subarea plans are permanently managed

- Monitoring indicates that reserve areas are providing adequate suitable habitat to sustain populations or Otay tarplant and the pollinators that support it.

- Sufficient numbers of seeds representing the range of genetic variability of Otay tarplant are collected and securely stored.

- Actions needed to conserve Otay tarplant that are outlined in the MSCP and its subarea plans are fully implemented

- The genetic variation of Otay tarplant is maintained across its range.

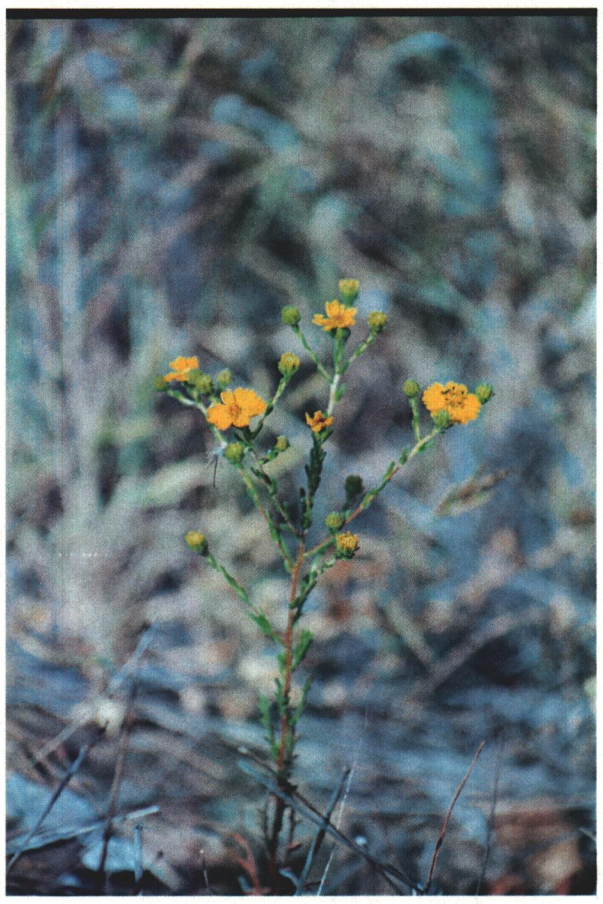
It is anticipated that monitoring of Otay tarplant populations will be necessary for at least 24 years, to determine if recovery criteria have been met. The 24-year period will incorporate three drought cycles.

Who is responsible for implementing a recovery plan?
The Service has the responsibility for implementing recovery plans, and only Federal agencies are required to take part in the effort.

However, the participation of a variety of groups is essential to successful recovery of threatened and endangered species.

Do recovery programs work?
Yes, but recovery is a challenge that takes time. The recovery efforts of the Service, other Federal agencies, States, Tribal and local governments and private landowners have managed to hold those species with declining population trends to an overall average of 35 percent.

Of all the species listed between 1968 and 1998, only 7--or less than 1 percent--have been recognized as extinct, and subsequently delisted. The fact that almost 99 percent of listed species have not been lost speaks to the Act's success as a mechanism for conservation of species that are at risk of extinction.



How is the public involved in this planning process?

Public comments on this draft plan are encouraged and should be sent to the Field Supervisor, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, California 92009.

Comments may also be submitted by electronic mail (e-mail) to tarplant@fws.gov. When submitting e-mail comments please submit them in ASCII format and avoid the use of special characters and encryption. Please include "Attn: Otay Tarplant" in the subject line, and your name and return e-mail address in the body of your message. Please note the e-mail address will be closed out at the termination of the public comment period.

Comments must be received by March 2, 2004. All comments will be reviewed and addressed by the Service in the final recovery plan.

The draft recovery plan is available online at **http://pacific.fws.gov/ecoservices/endangered/recovery/default.htm**. You may also request a hard copy of the plan by contacting the Carlsbad Fish and Wildlife Office at telephone number 760/431-9440.